

Application No. 10/812,542
Reply under 37 CFR 1.116
December 24, 2007

LISTING OF CLAIMS

1. (previously presented) An exhaust gas treatment catalyst comprising: (a) a carrier; (b) a first washcoat layer deposited on the carrier, said first washcoat layer comprising substantially only at least one refractory metal oxide; (c) a second washcoat layer deposited on the first washcoat layer, said second washcoat layer comprising substantially only at least one oxygen storage component and at least one binder therefor; and (d) a third washcoat layer deposited on the second washcoat layer, said third washcoat layer comprising at least one layer of one or more platinum group metal components supported on a refractory metal oxide support.
2. (previously presented) The catalyst of claim 1 wherein the third washcoat layer further comprises at least one oxygen storage component and at least one binder therefor.
3. (previously presented) The catalyst of claim 1 further comprising a fourth washcoat layer deposited on the third washcoat layer, said fourth washcoat layer comprising one or more platinum group metal components supported on a refractory metal oxide support.
4. (previously presented) The catalyst of claim 3 wherein the fourth washcoat layer further comprises at least one oxygen storage component and at least one binder therefor.
5. (original) The catalyst of claim 3 wherein the refractory metal oxide employed in the first layer, third layer and the fourth layer is independently selected from the group consisting of alumina; titania; zirconia; mixtures of alumina with one or more of titania, zirconia, and ceria; ceria coated on alumina; and titania coated on alumina.
6. (previously presented) The catalyst of claim 3 further comprising an overcoat layer deposited on the third or the fourth washcoat layer, said overcoat layer

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comprising at least one catalyst poisons sorbent.

7. (original) The catalyst of claim 6 wherein the carrier comprises a ceramic or metal having a honeycomb cellular structure comprising hexagonal, rectangular or square cells.

8. (original) The catalyst of claim 7 wherein the first, second, third, fourth and overcoat layers have thicknesses at their respective edges and corners of the cells as follows:

<u>Layer</u>	<u>Edge Thickness, μ</u>	<u>Corner Thickness, μ</u>
First	about 3 to about 15	about 30 to about 200
Second	about 5 to about 15	about 30 to about 100
Third	about 5 to about 15	about 30 to about 100
Fourth	about 5 to about 15	about 30 to about 100
Overcoat	about 5 to about 15	about 30 to about 100

9. (original) The catalyst of claim 1 wherein the oxygen storage component is selected from the group consisting of ceria, praseodymia, a ceria-praseodymia composite, a ceria-praseodymia-zirconia composite and a ceria-praseodymia-zirconia-neodymia composite, and the binder comprises zirconia.

10. (previously presented) The catalyst of claim 1 wherein the catalyst comprises at least two catalytic zones.

11.- 20. (cancelled)

21. (previously presented) The catalyst of claim 1, wherein the first layer comprises at least 76 weight % of one refractory metal oxide.

22. (currently amended) The catalyst of claim 21, wherein the first layer comprises active ingredients ~~other than stabilizers~~ in a quantity not exceeding approximately 12 weight %.

23. (currently amended) The catalyst of claim 22, wherein the ~~second~~ first layer comprises stabilizers in a quantity not exceeding approximately 12 weight %.

24. (previously presented) The catalyst of claim 23, wherein the second layer comprises at least 76 weight % of one refractory metal oxide.

25. (currently amended) The catalyst of claim 24, wherein the ~~first~~ second layer comprises active ingredients ~~other than stabilizers~~ in a quantity not exceeding approximately 12 weight %.

26. (previously presented) The catalyst of claim 25, wherein the second layer comprises stabilizers in a quantity not exceeding approximately 12 weight %.

27. (withdrawn) An exhaust gas treatment system comprising the catalyst of claim 1, an upstream EGO or air/fuel ratio sensor, and a downstream EGO sensor.

28. (withdrawn) An exhaust gas treatment system comprising the catalyst of claim 3, an upstream EGO or air/fuel ratio sensor, and a downstream EGO sensor.

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29. (withdrawn) An exhaust gas treatment system comprising the catalyst of claim 7, an upstream EGO or air/fuel ratio sensor, and a downstream EGO sensor.